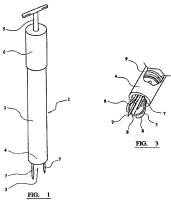
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	United Kingdom		US 5120099 A	US 5080357 A	US 4589661 A
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(54) Abstract Title Golf ball retrieving device

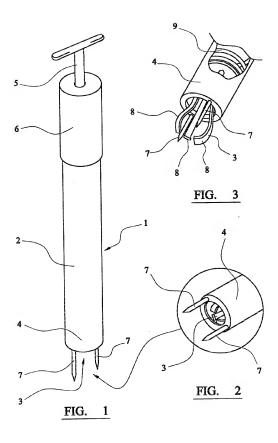
(57) A retrieving device 1, eg for golf balls, has an elongate hollow cylindrical body portion 2, retrieving means 3 located at an open lower end 4 of the body portion 2, and actuator means 5 located adjacent an upper end 6 of the body portion 2, the actuator means 5 being connected to the retrieving means 3 via the interior of the body portion 2 such that movement of actuator means 5 relative to the body portion 2 causes movement of the retrieving means 3 from a retracted position to an extended position. The retrieving means 3 comprises three curved gripping members 8 which are urged apart resiliently. The device may include spikes 7 for use as a pitch fork and/or to assist in holding the device upright.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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RETRIEVING DEVICE

The present invention relates to retrieving devices, and particularly, but not exclusively, to retrieving devices for use while playing golf.

The game of golf requires repeated picking up of objects from the ground. The ball needs to be picked out of the hole at the end of every hole and any divots cut out of the ground should be replaced. In each of these instances a player is required to bend down, which for some players suffering from physical ailments is difficult or even impossible.

Existing retrieval devices for use when playing golf are often directed towards the retrieval of the ball from water hazards. Such devices are generally designed to have an extending reach, far beyond the vertical distance between a players hands and the floor. Furthermore, such devices also often retrieve the ball in a cup-like device. Such a cup-like device is unsuitable for retrieving a golf ball from within a hole.

A further example of a known device, often attached to the handle end of a golf putter, comprises a hemispherical orifice of rubber of a radius slightly smaller than that of a golf ball. To pick up the ball, the hemispherical orifice is pushed onto the ball, which is then held in place by a suction force. This type of device is only applicable to picking up a golf ball and is therefore unsuitable for picking up a ball the on green, (but not in the hole), as the pressure required to pickup the ball could dent the surface of the green. This would then require the player to bend down to repair this mark with a device such as a golfers pitch fork. The device is also unsuitable for picking up divots out out of the ground.

Preferred embodiments of the present invention seek to overcome the above disadvantages of the prior art. According to the present invention there is provided a retrieving device comprising:-

an elongate body portion;

retrieving means located adjacent a first end of said body portion and moveable relative thereto to grip an object; and

actuator means located adjacent a second end of said body portion and connected via the interior thereof to said retrieving means to move said retrieving means relative to said body portion.

The above described retrieving device provides the advantage of extending the reach of a golfer to enable objects to be picked up from the ground without having to bend over. Such a device is not restricted to picking up golfs balls but is also adapted to pick up other objects such as divots of grass.

In a preferred embodiment said retrieving means comprises a plurality of mutually cooperating gripping members having a retracted position and an extended position, wherein each said gripping members has a curved internal edge.

The device may further comprise biasing means for biasing said gripping members towards the retracted position thereof.

By providing a plurality of mutually cooperating gripping members, this provides the advantage that the gripping members fit easily and securely around a golf ball.

In a preferred embodiment, the device further comprises at least one spike located adjacent said first end of said body portion.

By providing a spike or spikes on the grasping end of the retrieving device, when not in use the retrieving device can be

stuck into the ground to stand upright, thus avoiding the requirement of a user to bend down to pick it up. The spikes can also be used as a "pitch-fork", that is a fork-like device used to repair the indentation marks left in the green by balls falling from a great height.

A preferred embodiment of the invention will now be described, by way of example only and not in any limitative sense, with reference to the accompanying drawings, in which:-

Figure 1 is perspective view of a retrieving device embodying the present invention and with gripping members in a retracted position;

Figure 2 is a detailed perspective view of the first end of the retrieving device of Figure 1; and

Figure 3 is a perspective, partially cut away view of the first end of the retrieving device of Figure 1, showing the retrieving means in an extended position.

Referring to the Figures, a retrieving device 1 has an elongate hollow cylindrical body portion 2, retrieving means 3 located at an open lower end 4 of the body portion 2, and actuator means 5 located adjacent an upper end 6 of the body portion 2. Spikes 7 are also located at the lower end 4 of body portion 2. The actuator means 5 is connected to the retrieving means 3 via the interior (not shown) of the body portion 2 such that movement of actuator means 5 relative to the body portion 2 causes movement of the retrieving means 3 from a retracted position (shown in Figure 2) to an extended position (shown in Figure 3). A spring (not shown) urges the retrieving means 3 towards the retracted position.

The retrieving means 3 comprises three curved gripping members 8 which are urged apart, either by virtue of their resilience or by means of one or more springs (not shown). When in a

retracted position, that is substantially held within the body portion 2, the gripping members 8 are held in relatively close proximity to each other and when in the extended position, substantially outside the body portion 2, the gripping members 8 adopt a spread apart orientation shown in Figure 3, in order to grip a ball or other object. In order to hold the ball the retrieving means 3 is urged towards the retracted position by the spring (not shown). However, as the ball is generally of larger diameter than the internal diameter of the body portion 2 the retrieving means 3 grips the ball, allowing it to be picked up.

To release the ball, actuator means 5 is pushed to move the retrieving means 3 towards the extended position. As the gripping members 8 are urged outwards, the grip on the ball is released.

It will be appreciated by persons skilled in the art that the above described embodiment has been described by way of example only, and not in any limitative sense, and that various alterations and modification are possible without departure from the scope of the invention as defined in the appended claims. For example such a retrieving device may have many uses outside of golf.

Claims

A retrieving device comprising:-

an elongate body portion;

retrieving means located adjacent a first end of said body portion and moveable relative thereto to grip an object; and

actuator means located adjacent a second end of said body portion and connected via the interior thereof to said retrieving means to move said retrieving means relative to said body portion.

- 2. A device according to claim 1, wherein said retrieving means comprises a plurality of mutually cooperating gripping members having a retracted position and an extended position, wherein each said gripping members has a curved internal edge.
- 3. A device according to claim 1 or 2, further comprising biasing means for biasing said gripping members towards the retracted position thereof.
- 4. A device according to any one of the preceding claims, further comprising at least one spike located adjacent said first end of said body portion.
- A retrieving device substantially as hereinbefore described with reference to the accompanying drawings.







Application No: Claims searched: GB 9918268.5 All

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Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): A6D (D11X)

Int Cl (Ed.7): A63B 47/02 57/00

ONLINE: WPI, EPODOC, JAPIO

Documents considered to be relevant:

Category	gory Identity of document and relevant passage		Relevant to claims
х	GB 2294404 A	(WHYTE) See especially Figures 1 to 3	1 to 3
х	US 5503394	(MAUCK) Whole document relevant	1 to 4
x	US 5330177	(ROGGE) See especially Figures 1 to 5	1 to 3
x	US 5120099	(FLETCHER) Whole document relevant	1 to 3
x	US 5080357	(WOLF) Whole document relevant	1, 2, 4
х	US 4589661	(ATTIG) Whole document relevant	1, 3, 4
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